

LONDON- WEST MIDLANDS ENVIRONMENTAL STATEMENT

Volume 5 | Technical Appendices

CFA13 | Calvert, Steeple Claydon, Twyford and Chetwode
Baseline report (CH-001-013)
Cultural heritage

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Department
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1 Introduction

1.1 Structure of the cultural heritage appendices

1.1.1 The cultural heritage appendices for Calvert, Steeple Claydon, Twyford and Chetwode community forum area (CFA13) comprise:

- baseline reports (this appendix);
- a gazetteer of heritage assets (Volume 5: Appendix CH-002-013);
- an impact assessment table (Volume 5: Appendix CH-003-013); and
- survey reports (Volume 5: Appendix CH-004-013).

1.1.2 Maps referred to throughout the cultural heritage appendices are contained in the Volume 5, Cultural Heritage Map Book.

1.2 Content and scope

1.2.1 This baseline provides the evidence base against which the assessment of assets that may be affected by the Proposed Scheme can be determined. It collates information about known and potential heritage assets from a variety of sources and presents a chronological description and discussion of the development of the study area, placing assets within their historical and archaeological context.

1.3 Study area

1.3.1 The Calvert, Steeple Claydon, Twyford and Chetwode community forum area lies within Aylesbury Vale District in Buckinghamshire, and within Cherwell District in Oxfordshire. It comprises parts of the civil parishes of Tingewick, Barton Hartshorn, Chetwode, Preston Bissett, Steeple Claydon, Twyford, Hillesden, and Godington.

1.3.2 All non-designated and designated assets within the land required for construction of the Proposed Scheme and within 500m of it have been detailed in this baseline assessment. In addition designated heritage assets have been examined within the zone of theoretical visibility (ZTV).

1.3.3 All identified assets are listed in Volume 5: Appendix CH-002-013 and shown on Maps CH-01-040b – CH-01-043a and CH-02-021 to CH-02-022 in Volume 5, Cultural Heritage Map Book.

1.4 Data sources

1.4.1 Sources examined as part of this baseline assessment include published secondary sources, cartographic sources, historic environment record (HER) data for undesignated heritage assets and English Heritage National Heritage List data for designated assets. A full list of published sources can be found at the end of this appendix.

1.5 Surveys undertaken

1.5.1 The following surveys were undertaken as part of the environmental impact assessment (EIA) process:

- light imaging detection and ranging (LiDAR)¹ survey of the majority of the Proposed Scheme and land around it (see Volume 5: Appendix CH-004-013);
- aerial photograph and hyperspectral survey of the majority of the Proposed Scheme and land around it (see Volume 5: Appendix CH-004-013);
- a programme of non-intrusive surveys including geophysical prospection (see Volume 5: Appendix CH-004-013); and
- site reconnaissance field inspections to review the setting of historic assets and the character and form of the historic landscape (incorporated into this appendix).

¹ Light detection and ranging (LiDAR) is a high resolution remote sensing technique to capture 3D data.

2 Geology, topography and landform

- 2.1.1 The study area lies within the northern parts of Buckinghamshire and Oxfordshire, the geology of which is dominated by undulating claylands of heavy blue-grey clays.
- 2.1.2 The clay forms part of two separate formations which interface at several points within the study area. These formations are the Stewartby and Peterborough Members. These clays overlie a bedrock geology of Jurassic limestone and sandstone of the Purbeck and Portland groups.
- 2.1.3 The topography of the claylands is generally regular, with limited changes of elevation.
- 2.1.4 The southern part of the study area is largely situated on solid geology, with very little recorded superficial deposits. Extensive clay extraction has taken place in this southern part of the study area.
- 2.1.5 Extensive drift deposits are recorded in the central and northern areas. In particular, sand and gravels associated with the Padbury Brook are recorded near Steeple Claydon and have produced remains of Palaeolithic date (discussed below).
- 2.1.6 These deposits of alluvium and terraces of the Padbury Brook approximately follow the course of the Proposed Scheme between Steeple Claydon and the Oxfordshire border. Such deposits have the potential to mask archaeological deposits and to 'seal in' deposits of palaeoenvironmental interest as well as other assets, although none have as yet been recorded within the study area. This may be a result of lack of archaeological fieldwork rather than lack of potential.
- 2.1.7 The northern area of the study area is dominated by deposits of glacial till rather than the alluvium and gravels recorded elsewhere. This till is centred around Twyford and Godington.
- 2.1.8 The Proposed Scheme partially follows the course of the now disused London Extension of the Great Central Railway Line. This 19th century railway may have truncated any archaeological deposits within its footprints, particularly where it is in cutting. The Proposed Scheme is significantly wider, however, and will be largely on undisturbed, 'green field' areas.

3 Archaeological and historical background

3.1 Introduction

- 3.1.1 This section provides a chronological overview of the archaeological evidence within the study area. This baseline review forms a contextualisation within which individual assets can be considered. Descriptions of all archaeological assets, whether designated or not, which lie wholly or partially within land required for construction of the Proposed Scheme, or within 500m of the edge of this land, are contained in a gazetteer in Volume 5: Appendix CH-002-013. The assets are mapped in Volume 5, Cultural Heritage Map Book, maps CH-01-040b to CH-01-043a and CHh-02-21 to CH-02-22. The gazetteer also considers all designated archaeological assets within the ZTV. The gazetteer entries include assessments of value where appropriate.

3.2 Early prehistory (circa 500,000 - 1,500 BC)

- 3.2.1 The earliest evidence of human occupation in Britain dates from the Lower Palaeolithic (circa 500,000 BC) onwards. This evidence comprises assemblages of flint tools of a variety of typologies and faunal remains.
- 3.2.2 In general very few Palaeolithic artefacts have been recorded in the clayland landscape which comprises the broad environs of the study area². Palaeolithic or Pleistocene artefacts and environmental remains generally comprise worked flint and faunal remains found on terrace gravels and contexts associated with major rivers or in cave sites.
- 3.2.3 Assemblages of Palaeolithic material have usually been recorded in lowland Britain reflecting both the exploitation of river valleys and coastal plains, glacial lakes and other potential hunting grounds³, as well as the preferential survival of remains in such locations. Similarly assemblages are usually located in areas of particular geology, near to areas with flint-bearing rocks suitable for tool-making.
- 3.2.4 The Padbury Brook in the central part of the study area represents such a preferential area where the terrace gravels associated with the Brook may preserve redeposited remains. Palaeolithic remains have been recorded within the study area, including from gravels associated with the Padbury Brook, at Steeple Claydon and Twyford.
- 3.2.5 Remains of a mammoth, at least three rhinoceros, a horse and a species of elephant were recovered from a gravel pit opposite Three Bridge Mill⁴ (CALo48). A second gravel pit recorded evidence of mammoth, including tooth and bone. Although

² Silva, B., (2008), *An Period archaeological resource assessment of the Lower and Middle Palaeolithic in Buckinghamshire*, Prepared for the Solent-Thames Research Framework Resource Assessment: The Lower / Middle Palaeolithic.

³ Wymer, J., (1968), *Lower Palaeolithic Archaeology in Britain: As Represented by the Thames Valley*, John Baker.

⁴ Farley, M., (2012), Discoveries of Ice Age mammals and other Pleistocene deposits in Central and Northern Buckinghamshire. In: *Records of Buckinghamshire* Volume 52.

recorded inexactly by the antiquarian source of 1876, this is probably the gravel pit to the north of Lake Farm⁵ (CALo41).

- 3.2.6 Although the terrace gravels of the Padbury Brook are suitable for the discovery of early prehistoric remains, the heavy clay of the wider study area does not produce significant quantities of raw material for early tool production. As such the potential for remains of Lower or Middle Palaeolithic date is considered to be focussed on the areas of drift geology adjacent to the Padbury Brook.
- 3.2.7 Remains dating from the Upper Palaeolithic (circa 50,000 – 10,000 BC) and Mesolithic (circa 10,000 – 4,000 BC) are scarce in northern Buckinghamshire. Such remains would comprise worked flint and stone (including microliths, which are recorded in greater numbers in the upland areas of Buckinghamshire than in the lowland valleys⁶) or bone scatters reflecting the temporary camps of nomadic hunter-gatherer groups. This evidence would be preserved as scatters of material within the plough soil and subsoil.
- 3.2.8 Mesolithic sites in the wider region are generally located on rising ground overlooking river valleys and watercourses and are frequently found on sandy geology such as the Corallian Ridge and the Hampshire Greensand⁷. These landscapes are not recorded within the study area which is characterised by heavy clay, occasionally overlain with superficial deposits associated with watercourses. Hunter-gatherer groups in the Mesolithic increasingly began to exploit a wider range of landscapes and localities⁸, potentially also including the claylands within the landscape of the study area. Given the established exploitation of the uplands elsewhere in Britain, there may be some low potential for remains of this date to lie within the study area. To date, however, no such remains have been recorded anywhere within the study area. Those areas closer to the Padbury Brook and its tributaries are considered to have the most potential for remains of Mesolithic date.
- 3.2.9 The Neolithic (circa 4,000 – 2,400 BC) period is generally characterised by more permanent settlement, a reduction in nomadic, transient hunter-gatherer groups, and by the establishment of farming. Despite this shift to agriculture, hunting, gathering and fishing remained important to the local economies⁹.
- 3.2.10 Settlement evidence for the Early Neolithic commonly comprises flint and stone scatters, limited pottery remains, and occasional cut features such as pits. A polished hand axe of this period was found near to Steeple Claydon (CALo42), and represents the only Neolithic evidence recorded in the area.
- 3.2.11 Settlement enclosures and funerary monuments begin to be recorded in the landscape in the later Neolithic, but are scarce, and none are recorded within the study area.

⁵ Farley, M., (2012).

⁶ Hey, G., (2010), Late Upper Palaeolithic and Mesolithic. In: *The Solent Thames Archaeological Research Framework*.

⁷ Hey, G., (2010).

⁸ Barton, R.N.E and Roberts, A. J., (2004), The Mesolithic period in England: current perspectives and new research. In: Saville, A (ed), *Mesolithic Scotland and its Neighbours*, Society of Antiquaries of Scotland, Edinburgh.

⁹ Thomas, J., (1999), *Understanding the Neolithic*, Taylor and Francis, London.

- 3.2.12 Evidence for this period elsewhere in Buckinghamshire suggests that settlement continued to be situated adjacent to watercourses¹⁰, with evidence frequently recorded buried or concealed beneath colluvium¹¹. The emphasis on exploitation of free-draining lighter soils remained, suggesting some limited potential along the superficial deposits associated with the Padbury Brook.

3.3 Later prehistory (circa 1,500 BC - AD 43)

- 3.3.1 The Bronze Age (circa 2,400 – 700 BC) is defined by the first usage of copper and bronze working in Britain as well as the introduction of Beaker pottery. Early Bronze Age settlement evidence is likely to be broadly similar to that of the Neolithic comprising artefactual evidence and limited features, overwhelmingly cut pits. The evidence for Bronze Age settlement is much scarcer than that for funerary activity.
- 3.3.2 Early Bronze Age settlements are most likely to be found on rising ground overlooking water courses and river valleys, or other lighter free-draining soils, a reflection of the need for the resources and transportation provided by the major rivers.
- 3.3.3 Funerary remains are characterised by a shift from group burials and large group tombs to round barrows and individual burial, including the first recorded round barrows. These barrows are recorded across Britain and possibly reflect territorial boundaries¹². These features more frequently survive as upstanding earthworks in the uplands but in the lowland as ploughed out ring ditches. This is partially a reflection of differential preservation due to differences in land use, and but perhaps also a reflection of the increasing exploitation of more marginal land.
- 3.3.4 One possible funerary mound is recorded near to Cowley (CALo67). This feature is recorded as a mill mound by the Buckinghamshire HER, but investigation during the course of this assessment suggests it is of prehistoric date, based upon its relationship with surrounding medieval ridge and furrow earthworks. A second such barrow was visible in the hedgerow to the south, which was identified during this assessment.
- 3.3.5 Extant barrows can sometimes be difficult to interpret due to their physical similarity to mill mounds and other later features. Round barrows also contain below ground elements, including ring ditches and primary and secondary burials which may survive even when the barrow itself is destroyed. Two possible barrows survive as ring ditches, recorded on aerial photographs, to the north of Chetwode (CALo99, CAL106). Further barrows are recorded to the north of the study area, on the till landscape of Oxfordshire and Northamptonshire.
- 3.3.6 The Middle Bronze Age (circa 1,500 - 1,100 BC) saw the first sustained settlement evidence with round houses, field enclosures, and droveways all recorded elsewhere within Buckinghamshire. Settlement evidence for this period comprises more substantial cut features (including postholes, gullies, enclosures and paddocks) as well as pottery and bronze artefacts. Roundhouses are the typical settlement feature of

¹⁰ Kidd, S., (2010), Prehistoric Farmers. In: Farley, M. (ed), *An Illustrated History of Early Buckinghamshire*, Buckinghamshire Archaeological Society, Aylesbury.

¹¹ Bradley, R., (2010), The Neolithic and Early Bronze Age, In: *The Solent Thames Archaeological Research Framework*.

¹² Watson, A., (2001), Round Barrows in a Circular World, In: Brück, J., *Bronze Age Landscapes: Tradition and Transformation*, Oxbow, Oxford.

the period found both in isolation and in small groups. As with earlier periods these settlements are most likely to be found overlooking water courses in landscapes with free-draining soils suitable for agriculture. As such the potential for such features is considered greatest in the central and northern parts of the study area, adjacent to the Padbury Brook.

- 3.3.7 As well as settlement there is also evidence in the study area for Bronze Age land division, evidence for which survives as extant landscape features elsewhere in Buckinghamshire. These divisions survive as shallow cut features as well as earthworks and large dykes. There is no evidence for similar large scale land division in the clay uplands which may have been more suitable for rearing cattle and horses rather than arable agriculture¹³. Surviving evidence for this land division would comprise linear earthworks and ditches which do not correspond to later field boundaries.
- 3.3.8 The Bronze Age pattern of isolated farmsteads changes in the Iron Age (700 BC – AD 43). This period saw the addition of larger settlements and more centralised features such as hill forts, of which the nearest example is at Aylesbury, and oppida, the nearest of which is at St Albans. These large settlements are rarer in North Buckinghamshire than in some other parts of southern Britain such as Wessex. This may reflect the use of the claylands for livestock as opposed to arable agriculture.
- 3.3.9 In the Late Iron Age the study area probably fell within the territory of the *Catuvellauni*¹⁴, with a major oppidum at St Albans.
- 3.3.10 Population increase during the Iron Age may have necessitated farming on previously more marginal areas such as the clay uplands. It has been established from mollusc and pollen evidence that the landscape had been largely cleared of woodland in the Bronze Age, which may have further encouraged farming in the study area. Evidence of Iron Age settlement in the landscape around the study area is scarce, although this is more likely to be a function of a lack of archaeological investigation in the region.
- 3.3.11 As with preceding periods the geology and topography would have presented a challenge to agriculture, but settlement may have occurred adjacent to watercourses, particularly in the southern and central areas. A putative Iron Age enclosure has been recorded from cropmarks to the north of Godington (CAL075), adjacent to the Padbury Brook. The full extent of this cropmark complex is not established, but based on the aerial photography survey carried out as part of this assessment (Volume 5: Appendix CH-004-013) it does not appear to extend into the land required for the construction of the Proposed Scheme.

¹³ Williams, R. J., (1993) *Pennylands and Hatigans: Two Iron Age and Saxon Sites in Milton Keynes*, Buckinghamshire Archaeological Society, Aylesbury.

¹⁴ Cunliffe B., (2005) *Iron Age Communities in Britain* An account of England, Scotland and Wales from the Seventh Century BC until the Roman Conquest (3rd Ed), Routledge, Abingdon.

3.4 Romano-British (AD 43 - 410)

- 3.4.1 Changes in settlement patterns in Buckinghamshire in the Late Iron Age/Roman Period have been described as "subtle rather than dramatic"¹⁵. The study area during this period formed part of the Roman civitas Catuvellaunorum¹⁶.
- 3.4.2 It is currently difficult to determine the potential for continuity of occupation of Late Iron Age sites into the Roman period within the study area. Settlement of Roman date is usually more extensive in scale than that of the later Iron Age with a greater variety of material culture (including new pottery typologies, metalwork and glass). There is also widespread use of stone, brick and tile for building. The establishment of the Roman road network had a major effect on the landscape leading to the establishment of new settlements such as Fleet Marston and the growth of existing centres such as St Albans.
- 3.4.3 The northern boundary of this study area partly runs along the putative line of a Roman road (Margary route 160a)¹⁷ that links the Conquest period fort and later town at Alchester with the town at Towcester (Lactodurum) (CAL116). Given the proximity of this road which represents a likely focus for Roman settlement, there may be potential for associated remains to extend into the study area. Currently recorded evidence for Romano-British remains in the study area is, however, scarce.
- 3.4.4 There are antiquarian reports of Roman remains near to Great Pond (CAL015). This comprised an "earthen pot full of brass coins found under a tree root, by the Great Pond in Sir Thomas Chaloner's Wood". These were subsequently identified as coins of the emperors Carausius and Allectus. Such a hoard is considered unlikely to be indicative of potential settlement remains.

3.5 Early medieval (AD 410 - 1066)

- 3.5.1 Evidence for the post-Roman transition period in Buckinghamshire is extremely rare and poorly understood. There may have been a refocusing of settlement onto lighter soils in the post-Roman period, moving away from the heavy clay and Roman road network¹⁸.
- 3.5.2 A number of Late Saxon (AD 850 - 1066) settlements are likely to have been precursors to extant villages, making identification difficult. Settlement change in the early medieval period, the shift from dispersed to nucleated villages, is therefore likely to have been largely concealed by subsequent development. Twyford, Steeple Claydon, Preston Bissett, Godington, Chetwode and Barton Hartshorn are all recorded in the Domesday Book of 1086, suggesting they had Saxon origins. Steeple Claydon is traditionally believed to be the site of a Saxon 'folk mote' or court which was held as part of the Hundred of Lamua. Earthworks indicative of a shrunken medieval village lie to the south of the village and these may have Saxon origins (CAL035, CAL036).

¹⁵ Kidd, S., (2010).

¹⁶ Zeepvat, R. J. and Radford, D., (2007), *Roman Buckinghamshire*, (draft) Solent Thames Research Framework.

¹⁷ Margary, I., (1973), *Roman Roads in Britain*, 3rd Ed, J.Baker.

¹⁸ Zeepvat, R.J. and Radford, D., (2007).

- 3.5.3 A Saxon charter outlining the extent of an estate at Chetwode dates to 949¹⁹. The charter concerns the grant of an estate held by King Eadred to AEthelmaer, his praeses (governor) at Buckingham. The bounds of the estate outlined in the charter extended to the Oxfordshire county boundary and ran south almost as far as Steeple Claydon²⁰, covering four parishes. The name 'Chetwode' may derive from its location within the 'Chetwood', a putative northern extension of Bernwood Forest²¹. Chetwode itself, as a manorial settlement, may have been established in the 7th century AD.
- 3.5.4 The landscape within the southern part of the study area during this period was probably at least partially wooded and formed part of the Forest of Bernwood and its northern extension the Chetwood. This represents both a pragmatic use of the heavy clay for grazing rather than arable²², and a mechanism of direct control of the countryside by the monarch. There is a reference in the Anglo-Saxon Chronicle to Bernwood Forest as a location which Viking raiders passed through on the way to an ambush²³ and there is later evidence of Saxon royalty hunting in the forest, including the construction of a royal hunting lodge at Brill which lies to the west of the study area²⁴. Bernwood was later designated as a royal forest following the Norman Conquest (see below). The forest covered a substantial area during the Late Saxon and Early Norman periods, reaching a zenith in the 12th century, before its contraction and disintegration in the later medieval period²⁵. The study area lies in the northern part of the former forest but it is likely that the Padbury Brook marked the boundary of Bernwood Forest proper. It is considered likely that at least the northern area of the study area around Chetwode was largely deforested by the end of the early medieval period²⁶.

3.6 Medieval (1066 - 1539)

- 3.6.1 The broad pattern of landscape and settlement which exists in the study area today was laid out during the early medieval and medieval period. Clustered villages surrounded by agricultural hinterland predominate, with the exception of the dispersed Saxon settlement at Chetwode. These medieval nucleated settlements are associated with scattered manors and farmsteads in the surrounding countryside. The landscape was likely to have been at least partially wooded.
- 3.6.2 The southern part of the study area formed part of the Royal Forest of Bernwood throughout much of the medieval period. The eastern forest boundary was delimited by the Padbury Brook, although mention of a northern extension, the Chetwood²⁷, suggests the entire study area once formed part of a forest.

¹⁹ Baines, A. H. B., (1998), The Chetwode-Hillesden Charter of 949. In: *Records of Buckinghamshire*, Volume 24.

²⁰ Baines, A. H. B., (1998).

²¹ Baines, A. H. B., (1998).

²² Farley, M., (2010) *Saxon Buckinghamshire*. In: Farley, M. (ed), *An Illustrated History of Early Buckinghamshire*, Buckinghamshire Archaeological Society, Aylesbury.

²³ Farley, M., (2006), *Saxon Buckinghamshire*. In: *The Solent Thames Archaeological Research Framework*.

²⁴ Harvey, I. M. W., (1997), Bernwood in the Middle Ages. In: Broad, J. and Hoyle, R., (eds), *Bernwood: The Life and Afterlife of a Forest*, University of Lancashire, Preston.

²⁵ Harvey, I. M. W., (1997).

²⁶ Baines, A. H. B., (1998).

²⁷ Baines, A. H. B., (1998).

- 3.6.3 'Forest' in this sense does not necessarily mean that it was wooded. The word may have originally been derived as a description of a place outside the ordinary laws and subject to special laws concerned with preserving game²⁸, specifically deer. Nearly always the legal forest was much larger than the physical woodland and areas of unenclosed heath and moorland were considered acceptable elements of a 'forest'²⁹. Any terrain that comprised 'vert', vegetation which afforded food and shelter for game, could be included within the forest³⁰. The establishment of these forests made the pursuit of deer a socially divisive function, restricting venison to the elites³¹ and the harsh punishments established following the Norman Conquest formed part of a process of direct control of elements of the landscape by the Crown³².
- 3.6.4 There is evidence of royal hunting in Bernwood from the pre-Conquest period (see above) and the settlement of Brill to the west of the study area included a hunting lodge built by Edward the Confessor. Brill itself is recorded in the Domesday Survey of 1086 as being part of a royal demesne manor with the surrounding landscape 'in the kings park'³³. This is the first formal declaration of the area as part of a Royal Forest and it is highly likely that the forest expanded throughout the 11th and 12th centuries in line with the expansion of the forest system throughout Britain. The Forest reached its largest extent in the second half of the 12th century when it was recorded as part of the 1184 Assize of Woodstock. The Forest at this point lay between River Great Ouse to the north, Claydon Brook and Padbury Brook to the east, the River Thame to the south, and extended far into Oxfordshire (at least as far as Woodperry) to the west. It should again be noted that this expansion under Henry II was probably a legal jurisdiction in order to provide a link with other Royal Forests rather than an expansion of physical woodland. The location of Padbury Brook within the study area suggests that the study area was situated on the edge of the forest, on the boundary between the Royal Forest and land held by local lords.
- 3.6.5 This expansion of the forest proved unpopular with local landowners and lords and in 1217 the 'Charter of the Forest' was issued. This 'disaforrested' (a legal process which removed the area from forest laws and restored it as common land) those areas claimed under Henry II and re-established Bernwood across a more compact area centred on Brill, Boarstall and Oakley³⁴, outside of the study area. In addition the granting of land in the forests to the nobility reduced the area directly controlled by the monarch³⁵. A perambulation of Bernwood carried out in 1298 records a much smaller area of forest. Several areas are excluded as being formerly part of the forest under Henry II but since having been specifically disaforrested. This includes woodlands at Middle Claydon (immediately to the east of the study area), suggesting that the study area no longer formed part of the Royal Forest by 1298³⁶. The earliest maps of Bernwood Forest dating from the late medieval and early post-medieval

²⁸ Rackham, O., (1990), *Trees & Woodland in the British Landscape: The Complete History of Britain's Trees, Woods and Hedgerow*, Phoenix Publishing, London.

²⁹ Harvey, I. M. W., (1997).

³⁰ Grant, R., (1991), *The Royal Forests of England*, Sutton Publishing Ltd., Stroud.

³¹ Sykes, N. J., (2006), The impact of Normans on Hunting. In: Woolgar, C. et al, *Food in Medieval England*, Oxford University Press, Oxford.

³² Grant, R., (1991).

³³ Harvey, I. M. W., (1997).

³⁴ Harvey, I. M. W., (1997).

³⁵ Harvey, I. M. W., (1997).

³⁶ Harvey, I. M. W., (1997).

periods show the extent of Bernwood Forest again focussed to the west, entirely outside of the study area. Being part of the forest may have had an impact upon the development of settlements within the study area, although it is acknowledged that it is difficult to recognise this in the layout of modern villages³⁷.

- 3.6.6 The combination of clay as a raw material and wood to provide fuel proved suitable for a thriving pottery industry around Brill and Boarstall, with its products marketed at Oxford, Northampton and Aylesbury³⁸.
- 3.6.7 Several areas of designated ancient woodland in the northern part of the study area probably previously formed part of the former forest (CAL110, CAL111, CAL112 and CAL113).
- 3.6.8 The earthwork remains of shrunken and deserted medieval villages (most Buckinghamshire villages reduced in size in the later medieval period³⁹) are recorded across the study area along with fishponds, moats, and evidence of higher status manorial and ecclesiastical settlement.
- 3.6.9 Steeple Claydon, in the eastern part of the study area, is recorded in the Domesday Survey and is of early medieval origin. The historic core of the village is centred on the church, which is bracketed by earthworks indicative of a former medieval settlement (CAL035, CAL036), and the former manor house of the Chaloner family (part of grouping CAL037).
- 3.6.10 Steeple Claydon watermill (CAL040) is recorded by English Heritage immediately to the north of the land required, temporarily or permanently, for the construction of the Proposed Scheme. No features are recorded in this area, however, and a 1930s survey of watermills in Buckinghamshire⁴⁰ suggests that Steeple Claydon watermill actually lay to the north of the village.
- 3.6.11 Twyford is a settlement of Late Saxon origin (CAL059) centred on a church and manor house. Earthworks indicative of former medieval buildings are recorded to the north of the village (CAL051), potentially a former manorial settlement associated with St Mary's House. These earthworks are approximately bounded by the former line of the Great Central Railway, although several uncertain earthworks to the north of the line do extend into the land required for the construction of the Proposed Scheme (CAL052).
- 3.6.12 St Mary's Church at Twyford (CAL057) lies between the extant village to the south and the earthworks of the former village to the north. It is a large Grade I listed building of medieval date. St Mary's House, a large timber framed building based around a core

³⁷ Jones, R., and Page, M., (2006), *Medieval Villages in an English Landscape: Beginnings and Ends*, Windgather Press.

³⁸ Harvey, I. M. W., (1997).

³⁹ Taylor-Moore, K., (2012) *Medieval Buckinghamshire*. In: Farley, M., (ed) *An Illustrated History of Early Buckinghamshire*, Buckinghamshire Archaeological Society, Aylesbury

⁴⁰ Freese, S., Farley, M., Legg, E. and Venn, J., (2007), *The Watermills of Buckinghamshire*, Buckinghamshire Archaeology Society, Aylesbury.

formed by two medieval open halls, lies immediately to the north-east of the church (CALo56). These buildings are discussed below.

- 3.6.13 As a medieval village Twyford formed the centre of an agricultural hinterland comprised of open fields. Ridge and furrow earthworks, remnants of this system, are recorded in the landscape to the north-east of the village within the land required for the construction of the Proposed Scheme (CALo53). Evidence of ploughed out ridge and furrow earthworks may survive in the surrounding landscape.
- 3.6.14 A moated site has been previously recorded at Allen's Ground, immediately to the south-east of Twyford, although no earthworks are extant at this location (CALo44).
- 3.6.15 Twyford Mill, a building in the location of potentially a much earlier medieval mill, is an extant as a post-medieval building to the south-west of the village (CALo63). There is a historic reference to the army of King Charles marching past the mill in 1644⁴¹.
- 3.6.16 A second mill is also recorded in the vicinity of Twyford. Three Bridge Mill (CALo47) lies to the east of Twyford and may have been established as a parish mill for Preston Bissett or Cowley to the north. It is possibly recorded in 1252 and certainly appears to have been extant by 1469. Although the extant buildings on the site are post-medieval, there is considered to be a high potential for medieval remains in this area.
- 3.6.17 Cowley is a small complex of farm buildings centred around two Grade II listed buildings, one of which may have medieval origins. A large complex of very well preserved earthworks indicative of a shrunken medieval village lie to the south-west of the village (CALo65). These earthworks include evidence of a moated site, house platforms and a fishpond. Finds, including medieval pottery, metalwork, and a stone coffin have also been recorded. Historic references suggest the medieval village supported a chapel, suggesting a relatively large settlement.
- 3.6.18 Godington is a small village in the western part of the study area, within Oxfordshire. Two Grade II listed buildings, comprising a church and manor house, may have medieval origins (CALo73). Extensive earthworks indicative of a shrunken medieval village are recorded to the south and west of these buildings (CALo72).
- 3.6.19 Chetwode (CALo98) has pre Norman Conquest origins but appears to have remained as a dispersed settlement into the medieval period. The centre of the village is designated as a conservation area, and includes a Grade I listed church, and several other historic buildings. These are discussed in the built heritage section below.
- 3.6.20 Several abandoned moated sites are recorded within the village. One extends around the extant post-medieval dwelling 'The Hermitage' which was formerly a farmhouse. The surrounding moat is extant as a pond to the south of the building, with shallow return arms detectible in the landscape to the north (CALo94). A second moated site, smaller but deeper, lies immediately to the north of the building (CALo95). The small size of the central island and the lack of a causeway suggest that this moat may have been landscaped in the post-medieval or modern period. A small area of possible

⁴¹ Freese, S., Farley, M., Legg, E. and Venn, J., (2007).

ridge and furrow earthworks (CALog2) are also recorded to the north of The Hermitage.

- 3.6.21 A particularly large moat lies to the north, immediately to the south of the church and Priory House. This moat is probably a former element of the priory which was established in 1245 by the Augustinians (CALog6). It had fallen out of use by 1460 and was rebuilt in 1480 and remained in use until the dissolution. The Grade I listed church of St Mary and St Nicholas is the only extant part of the priory, dating from 1245, and was previously the chancel of the priory. It includes a particularly significant 13th/14th century stained glass window. The church lies approximately 350m from the centreline of the Proposed Scheme.
- 3.6.22 A manor house lies to the north-east of the village (CALog1), along with several large fishponds (CALog0). A smaller fishpond lies in the village proper (CALog7).
- 3.6.23 Sunflower Cottage lies to the south of the village. It is a large post-medieval farm building, although with elements of potentially medieval date. A fishpond, probably of medieval date, is recorded on historic maps immediately to the south of the cottage (CALo82).
- 3.6.24 Chetwode Mill, which is extant as earthworks, survives within the land required for the construction of the Proposed Scheme (CALo70). A mill at Chetwode is recorded in the Domesday survey and in a document relating to Chetwode Manor of 1223. A survey of Buckinghamshire watermills⁴² notes that these sources refer to a mill of unusually low value, suggesting a simple horse-mill. The mill is last recorded as working in 1823. The surviving earthworks of the mill are low, with the tail race still extant, although interpretation is confused by the earthworks of a former off-road race track.
- 3.6.25 Barton Hartshorn is a village of medieval origin (CAL109). The extant buildings of the village are generally post-medieval but a pond and earthworks indicative of a shrunken medieval village lie to the west (CAL105).

3.7 Post-medieval (1539 - 1900)

- 3.7.1 The post-medieval period witnessed the widespread abandonment of the medieval agricultural organisation based on open fields with its ridge and furrow strips divided by headlands. This was replaced by enclosed fields both for arable production and to provide enclosed pasture. The enclosure of the landscape commenced in the later medieval period and accelerated after the final dissolution of the monasteries under Henry VIII between 1536 and 1539 brought more land into private ownership.
- 3.7.2 The landscape within the study area was enclosed in a piecemeal fashion from the 16th century onwards, before an organised programme of parliamentary enclosure was carried out in the 18th and 19th centuries. This led to the regular, rectilinear fields recorded in the southern part of the study area.
- 3.7.3 The region was fought over during the English Civil War. Oliver Cromwell stayed overnight in Steeple Claydon and his army camped to the south. The earthworks here,

⁴²Freese, S., Farley, M., Legg, E. and Venn, J., (2007).

although possibly part of a shrunken medieval village, may also reflect this post-medieval use (CAL035).

- 3.7.4 Several large houses established by gentry are present within the study area and are often associated with surrounding planned estates, parks and gardens.
- 3.7.5 Claydon, the 18th century seat of the Verney family, lies approximately 600m to the east of the Proposed Scheme, within the Waddesdon and Quainton area (CFA12). A large decoy pond lies within Decoypond Wood, probably associated with the estate (CAL002), and several farm buildings associated with the estate are recorded across the study area. Those that are designated as listed buildings are discussed in the Built Heritage section below.
- 3.7.6 A possible designed approach to Steeple Claydon Manor House is extant in the landscape, comprising an avenue of mature trees on alignment with the Manor House and Church (CAL034).
- 3.7.7 The land required for the construction of the Proposed Scheme largely follows the route of the London Extension of the Great Central Railway, an extant railway line established in the mid-19th century. This line and its extant features is discussed in the Built Heritage section below.
- 3.7.8 Watermills were a primary source of power through to the mid-18th century. The use of windmills also expanded during the post-medieval period and several have been identified within the study area (CAL067, CAL102).
- 3.7.9 Many of the farmhouses and associated agricultural buildings in the area were built between the 17th and 19th centuries and it is buildings associated with these scattered farmsteads and the settlements that comprise the majority of this period's built heritage.
- 3.7.10 A small group of former farm buildings, probably field barns, is recorded to the north of Twyford within the land required for the construction of the Proposed Scheme (CAL058). These are first recorded on the 1st Edition Ordnance Survey (OS) map of 1880. A second group of farm buildings is recorded within the land required, both temporarily and permanently, for the construction of the Proposed Scheme to the east of Chetwode (CAL0078). These buildings are no longer extant.
- 3.7.11 A post-medieval pond is recorded by the Buckinghamshire HER within the land required for the construction of the Proposed Scheme. It is not considered to be a significant heritage asset (CAL031).
- 3.7.12 A large pond, formerly part of the Chaloner estate, previously lay in the southern part of the study area (CAL014). It is no longer extant.

3.8 Twentieth century/modern (1900 - present)

- 3.8.1 Twentieth century industry is represented by the clay extraction pits that were worked at Calvert (CAL005, CAL007 and CAL017). These are recorded on maps dating from the mid-20th century, and included extensive infrastructure, including railway sidings

(CAL006) and a station (CAL009). Several large processing facilities are recorded in the northern area of the pits. This area is now the Calvert Jubilee Nature Reserve.

- 3.8.2 The most modern heritage asset in the study area comprises the former Royal Air Force (RAF) Finmere (WAD107). The airfield was opened in 1942 as a training base for for pilots of Mosquitos amongst other aircraft. The base was closed after the end of World War II, after which it was used for recreational flying.

4 Built heritage

4.1 Introduction

4.1.1 This section provides baseline information relating to built heritage assets within the land required for construction, temporarily or permanently, of the Proposed Scheme, 500m study area and wider ZTV. A broad overview of the character and form of the settlement pattern within the study area can be found in the Historic Landscape section of this appendix. This section provides the following information:

- descriptions of all built heritage assets or asset groupings wholly or partially within the land required, temporarily or permanently, for construction of the Proposed Scheme. This includes descriptions of settlements where relevant;
- descriptions of all built heritage assets or asset groupings wholly or partially within 500m of the edge of the land required, temporarily or permanently, for construction of the Proposed Scheme. This includes descriptions of settlements where relevant; and
- descriptions of selected designated assets within the ZTV.

4.1.2 Further information on all these assets, plus those other designated assets which lie within the ZTV but are not described in Section 4.4 of this appendix, can be found in the gazetteer in Volume 5: Appendix CH-002-013. The assets are mapped in Volume 5, Cultural Heritage Map Book, maps CH-01-040b to CH-01-043a and Ch-02-21to CH-02-22.

4.2 Built heritage assets within the land required, temporarily or permanently, for construction of the Proposed Scheme

Shepherd's Furze Farmhouse (CALo25)

4.2.1 Shepherd's Furze Farmhouse is a Grade II listed, two storey, three bay property dating to circa 1770. The front elevation of the property is dressed in stone with moulded stone eaves and plinths. The rest of the property has been fronted in brick.

4.2.2 The two outer bays of the front elevation have 20th century three-pane wooden casement windows (windows which are side hung to open on hinges), those on the ground floor having the addition of stone voussior arch heads above. The centre bay has a similar casement window set over a 20th century panelled door with a barred rectangular fanlight (glazed area above a doorway).

4.2.3 A late 19th century one storey, two bay extension is set back to the left of the property. This extension is of rat-trap bond brickwork and has 20th century casement windows. There are further modern extensions to the rear of the property which are not considered to be heritage assets.

4.2.4 The farmhouse was originally part of the Verney family estate and fittingly the east elevation of the property faces toward the family seat of Claydon House.

4.2.5 The building appears to be of one main build circa 1770 with some 19th and 20th century extensions at the rear. Assessment of the queen strut roof structure, which has been

strengthened in the last 50 years, and the partial light-weight timber framing in the floors suggests this building is a fairly conventional vernacular estate farmhouse of moderate value. Pencil-round mouldings were recorded on the arrises of one of the beams downstairs which indicate a mid-Georgian date. All the windows have been replaced and the original fireplaces have gone. The interior has been heavily reworked.

- 4.2.6 The front elevation is made of well fabricated ashlar limestone. This appears to be a clunch-like stone, similar to Totternhoe stone which is mined near Dunstable. Discussion with the owner indicates that when he was working on the interior of the house approximately 30 years ago he noticed a jumble of mouldings on the inner sides of at least some of the stones. This corresponds with the local tradition that the fabric had been reused from a part of Claydon House that had been demolished.
- 4.2.7 The value of Shepherds Furze Farmhouse is derived from its aesthetic, architectural, historic and archaeological interest, its role as a part the Verney Estate, and particularly the sections of its façade (made of Totternhoe stone) which have been re-used from Claydon House. Totternhoe stone might well have been transported relatively long distances for use in a building like Claydon House, so the front elevation of Shepherd's Furze should be considered as a piece of potentially important archaeological fabric.

Station House (formerly known as Hazelbach) (CALoo8)

- 4.2.8 Station House, (formerly known as Hazelbach), was built in the 1890s in conjunction with the construction of Calvert Railway Station on the Grand Central Railway. The house was built to act as the station master's house and is now the only building remaining that relates to Calvert Railway Station.
- 4.2.9 The Station is of some heritage value as an example of a very late 19th century cottage. The only element of its setting considered to contribute to this value is the relationship between it and the adjacent railway, and bridge, which are features of contemporary date.

Outbuildings at Manthorne Farm (CALo84)

- 4.2.10 Manthorne Farm is a 19th century farm with farmhouse and associated farm buildings.
- 4.2.11 Sale particulars from 1877 detail the farm as having a 'brick-built and slated farmhouse' with two sitting rooms, pantry, seven bedrooms and a kitchen, with a flower and kitchen garden to the exterior. There is also mention of a brewhouse, dairy, stables, cowshed and various other farm buildings all set in just under 190 acres.
- 4.2.12 The Bucket House is a single-storey masonry building with a traditional timber framed roof structure supporting slate tiles. It is estimated that the building has existed in its current form for approximately 100-150 years, though there is evidence to suggest the incorporation of an earlier structure. The west elevation contains a substantial amount of stonework compared to the brickwork apparent in the rest of the building. There is also an additional fireplace on this elevation which may be earlier in date. The fireplace and chimney to the centre of the east elevation is part of the current construction. The timber frame roof has a central truss, purlins spanning to the gable walls and supporting rafters.

- 4.2.13 The adjacent store building is a relatively modern (probably constructed in the last 50) simple brick structure with a low pitched corrugated steel roof.
- 4.2.14 The third farm building is an open fronted steel portal framed building with corrugated fibre cement roof sheeting. This building is also relatively modern in date.
- 4.2.15 Manthorne Farm is considered to be of limited value as an example of a post-medieval farm and yard. This value is considered to reside primarily in the aesthetic, architectural, historic and archaeological interest of the building; the setting, dominated to the east by the former Great Central Railway, is not considered to contribute to this value.

Former railways

- 4.2.16 The Great Central Railway (GCR) was the last of the great Victorian mainline railway projects and was opened in 1899 to link London, with a terminus at Marylebone, to Sheffield via Leicester and Nottingham.
- 4.2.17 The GCR had a junction at Calvert where it linked to the Buckinghamshire Line. Due to conflict with the Metropolitan Railway the link with the Metropolitan Railway at Quainton Road was bypassed in 1906 by the construction of a new link between Grendon Underwood and Ashendon to create the Great Central Joint Railway.
- 4.2.18 The GCR was constructed to a very advanced standard for its day with very few steep gradients and with sweeping curves to facilitate high speed traffic. The line was also designed to accommodate future European expansion. To this end (and unlike the other great Victorian mainlines) the structures on the line including bridges and platforms were constructed to accommodate the larger European gauge, with a long term view towards connection to Europe via a channel tunnel. Stations were also built to a standardised design as islands between the tracks in order that the track could be moved away from platforms and/or extra track could be added if and when necessary⁴³.
- 4.2.19 The GCR from the beginning had difficulty competing with the existing large railway conglomerates, especially in attracting passenger traffic. The GCR did, however, develop a niche for moving rich business passengers on fast luxurious trains, effectively creating Britain's first long distance commuter line. The GCR also developed strongly as a route for moving freight⁴⁴.
- 4.2.20 The financial crisis and poor relations with Europe engendered by World War I and its conclusion put paid to GCR hopes for a European connection and channel tunnel. Under the 1923 Railway Grouping Act the GCR became subsumed within the London and North Eastern Railway. Duplicating services already available via both the London and North Eastern Railway and London Midland and Scottish, the former line of the GCR did not prosper. As freight transport by rail declined after World War II the line became increasingly neglected, especially after nationalisation in 1948.
- 4.2.21 Traffic on the former GCR was run down during the early 1960s with most local and branch line passenger services being cancelled in 1963 with closure of many rural stations.

⁴³ Healy, J., (1987), *Echoes of the Great Central*, Haynes, UK.

⁴⁴ ⁴⁴ Healy, J., (1987).

Mainline services were also heavily curtailed with trains running beyond Nottingham being cancelled in 1960 and the service between London and Nottingham reduced to a mere three services per day⁴⁵.

- 4.2.22 Several railway bridges lie within the study area (CALo10, CALo21, CALo22, CALo23, CALo45, CALo60, CALo61, CALo68, CALo86 and CAL108). There was also a siding at Calvert which survives as a low earthwork. Calvert Station, now disused, lies within the land required for the construction of the Proposed Scheme (CALo09).

4.3 Built heritage assets within 500m of the boundary of the land required, temporarily or permanently, for construction of the Proposed Scheme

- 4.3.1 The following built heritage assets or asset groupings, both designated and non-designated, lie wholly or partially within 500m of the land required, temporarily or permanently, for construction of the Proposed Scheme. The assets are described from south to north.

Calvert

- 4.3.2 Calvert lies immediately to the west of the land required for the construction of the Proposed Scheme. Although it was founded to provide accommodation to the workers at the claypits, the vast majority of the settlement is a 21st century estate. This area is not considered to be a significant heritage asset, although the small area of older buildings, including Hazelbach (CALo08), is considered to be of low heritage value. Hazelbach is discussed above.

Blackmoorhill Farmhouse (CALo28)

- 4.3.3 Blackmoorhill Farmhouse was originally constructed in 1770 of dressed stone, although it has been partially rebuilt in brick. It formed an outlying farmhouse associated with the Verney Estate which was focussed on Claydon Park approximately 1km to the east. Blackmoorhill Farmhouse is orientated to face the park, although it is accessed from a driveway to the south. Blackmoorhill Farmhouse is isolated in the landscape with a small garden and hedgerows surrounded by open agricultural fields. An extant railway runs approximately 400m to the north of the farmhouse.
- 4.3.4 The value of the building is derived from its aesthetic, architectural, historic and archaeological interest as an extant example of a post-medieval estate farmhouse and also its relationship with the historic estate at Claydon Park. This relationship is illustrated by its position in relation to the park, and by the open fields around the buildings which illustrate the traditional relationship between the farm and the rural landscape. This makes a limited contribution to the value of the farmhouse. The railway line to the north is not considered to contribute to the value of the building, but nor is it considered to detract from it.

⁴⁵ Davies, R. & Grant, M., (1984), *Forgotten Railways: Chilterns and Cotswolds*, David and Charles Publishing, Newton Abbot.

Rose Hill Farm (CALo27)

- 4.3.5 Rose Hill is an asset grouping of two Grade II listed buildings. Rose Hill Farmhouse is a brick structure with a dressed stone façade, constructed circa 1770. It forms the eastern edge of a three sided courtyard, with the north and west sides formed by associated farm buildings constructed in the late 18th century. The farm was constructed as part of the Verney Estate, centred on Claydon Park, approximately 1.6km to the east. It is orientated such that the façade faces the park. The courtyard is approached via a tree-lined avenue linking the buildings to the public road to the east. The farmhouse is situated within a small garden and grounds. The wider setting is formed by open agricultural fields but is constrained by the extant railway which runs approximately 170m to the north of Rosehill Farm.
- 4.3.6 The value of the buildings is derived from its aesthetic, architectural, historic and archaeological interest from their fabric as an example of an 18th century estate farm. The relationship between the building and the park at Claydon also makes an important contribution to its value, as this places the building within its original context as an element of 18th century land management. The wider surroundings make a more limited contribution to this value by placing the building within an agricultural landscape, as it would have been situated originally. The railway line to the north is not considered to make a contribution to this value.

Steeple Claydon (CALo39)

- 4.3.7 Steeple Claydon is a large settlement to the north of the proposed infrastructure maintenance depot (IMD). The settlement has shifted focus from its medieval origins, extending to the west with a large area of post-medieval and modern construction.
- 4.3.8 Steeple Claydon is a large village situated on a north-facing slope. It comprises a mix of 17th, 18th and 19th century housing but is not designated as a conservation area. The listed buildings within the village are focussed in a strip along Queen Catherine Road and Chaloners Hill, with a small group at the western edge of the village. For clarity the St Michael's Church and Manor Farmhouse are discussed separately below.
- 4.3.9 The listed buildings at Steeple Claydon comprise Camp Barn, a small 17th century barn constructed of rubble stone with a hand-cut tile roof. It includes a brass plaque recording the nearby encampment of Cromwell's army during the Civil War. Several extant earthworks to the south of the barn mark the area of the camp.
- 4.3.10 Nearby is number 18 Queen Catherine Road, a large timber-framed house with a thatched roof of 17th century date. The Phoenix, a large timber framed public house with a thatched roof and red-brick chimney stacks dating from the 17th or 18th century lies to the north. Opposite the Phoenix is the Small Cottage, a timber-framed building with a thatched roof and brick chimney stack dating from the 17th century. These buildings are situated on Queen Catherine Road, together with Well Cottage, a row of two storey cottages in chequer brick with a thatched roof, which has a 16th century core. Further north along Queen Catherine Road is the former library, a brick built building with a hand-cut tile roof which originated as a school in 1656. A village hall and caretaker's flat were added at the turn of the century, and are in an 'arts and crafts' style. The interior of the library includes 17th century painted panelling and benches and a cheque from Florence

Nightingale set into a stone plaque. A Grade II listed water pump is also present within the settlement.

- 4.3.11 Queen Catherine Road leads onto Chaloners Hill, a largely residential street which includes the Grade II listed Foxgloves, a late-17th century whitewashed stone cottage with a thatched roof and number 3, a timber-framed building with a thatched roof and a brick chimney stack.
- 4.3.12 Another small group of listed buildings lies in the north of the village and comprises the Milk Pail, number 10 North End Road, Vine Cottage, Tudor Cottage and Rhenold's Close. All of these buildings are 17th century timber-framed brick building with thatched roofs, a reflection of the vernacular style of the period.
- 4.3.13 The final group of listed buildings comprises three buildings in the western area of the village. Willowvale Farmhouse is a timber-framed building with a thatched roof dating from the 17th century, although in contrast to contemporary buildings elsewhere in the village the brick infills are not whitewashed. Willowvale Cottage is a timber-framed building with a thatched roof dating from the 17th century, although with subsequent alterations, and numbers 41-45 West Street is a row of three cottages in brick with a thatched roof dating to the early 19th century.
- 4.3.14 The value of the village comes from the character and appearance formed by the large number of listed buildings. These date from a range of periods although predominantly are of 17th century origin in the local vernacular style of a timber frame and thatched roof. The setting of the village is overwhelmingly rural and contributes to the value of the village by placing it within its historic, agricultural context.

Church of St Michael, Steeple Claydon (CALo37)

- 4.3.15 The Church of St Michael in Steeple Claydon lies approximately 350m to the north of the land required for the construction of the Proposed Scheme. It is a Grade II* listed building. It is a large parish church with a 14th century chancel. It was largely restored in the 19th century and is a mix of rubble and brick with a tall, locally prominent spire. The building is approached via a drive and gate immediately to the south-east of the tower, which make for a distinctive approach. The churchyard is large with a large graveyard extending to the south-east. The wider setting of the building is divided between two distinct landscapes; the village of Steeple Claydon to the north-west and the open fields and landscape to the south-east which are clearly visible. A wide avenue of trees extends away from the church to the south-east. The church lies to the south-east of the village core and its setting has a degree of isolation.
- 4.3.16 The value of the building is derived from its aesthetic, architectural, historic and archaeological interest. It is an example of a large parish church with 14th century elements, and has historic and aesthetic value. The link between the church and the village and parish it serves is considered to make a large contribution to this value, as this pastoral link was the impetus for the construction of the church. More immediately the churchyard surrounding the building establishes the consecrated ground which defines

the church and the open fields beyond place it in context as the hub of a rural parish. These elements of the setting are considered to contribute to the value of the building.

Manor Farmhouse (CALo38)

- 4.3.17 Manor Farmhouse in Steeple Claydon lies approximately 380m to the north of the land required for the construction of the Proposed Scheme. It is a Grade II listed building. It is a two storey house constructed of red brick on a stone base with a hand-cut tile roof fitted with dormer windows. An inscription on the front records a construction date of 1717, although the building has subsequently been extended at least twice. The building lies immediately to the north-east of the Church of St Michael and is situated in a small garden. It lies outside of the developed core of Steeple Claydon and has open agricultural fields to the north-east and south-west, although these views are restricted by a small group of residential buildings which lie immediately to the west of the farmhouse.
- 4.3.18 The value of Manor Farmhouse is derived from its aesthetic, architectural, historic and archaeological interest as an example of a large post-medieval farmhouse. The name suggests it may have medieval origins, potentially as a high status building, and any medieval elements of the fabric would make a particular contribution to this value. The immediate setting of the building, particularly its relationship to the adjacent locally prominent spire of the Church of St Michael, is considered to make some contribution to its value. The proximity to the church emphasises the importance of the Manor House as an important building outside of the existing core of Steeple Claydon. The wider setting makes a much more limited contribution to the value of the building, with the restricted views of open countryside placing the building in its original rural context.

Twyford (CALo59)

- 4.3.19 Twyford is a small settlement to the south of the land required for the construction of the Proposed Scheme. It is situated adjacent to the Padbury Brook, with the northern edge framed by the former Great Central Railway Line which was dismantled in 1966. The name 'Twyford' derives from the need for two fords to cross the Padbury Brook. It is a parish centre with several small outlying hamlets.
- 4.3.20 The village contains eight Grade II listed buildings as well as a Grade I listed church and a number of undesignated buildings. The church and Church Cross, and St Mary's House are discussed as specific assets below.
- 4.3.21 The historic core of the village where all the listed buildings are situated is formed by Main Street which runs approximately north/south, before splitting into Church Lane and School Lane. Three listed buildings are situated on Main Street. These comprise the Haven, a small cottage in rubblestone with a thatched roof dating from the 18th century; a small row of 17th century timber-framed cottages with a thatched roof and the Old Post Cottage, a small cottage with an associated post-office dating from the 19th century. The cottage has a thatched roof while the post-office is covered in slate.
- 4.3.22 One listed building, the Old Post Office, lies on School Lane. This is a cottage in rubble and brick with a thatched roof, and is potentially of 17th century date.
- 4.3.23 Two Grade II listed buildings are situated on Church Street. Claydon Place is a small cottage built in brick with a timber frame and a thatched roof. The building is of late 18th

century date and forms the central bay of a small terrace. The remaining elements of the terrace are of much later date and are not listed buildings. The Red Lion, to the north, is a small 19th century building in brick and stone with a tiled roof. A partial timber frame is visible, suggesting possibly earlier elements of the building. A former public house, it is now a residential building.

- 4.3.24 Twyford is small and generally rural in character, with more modern residential buildings interspersed with the designated (and non-designated) historic buildings and the line of the former Great Central Railway to the north. The value of the village is derived from its aesthetic value, its character and appearance as a small rural village with historic buildings in the local vernacular style. The surrounding landscape does contribute to this value; the medieval earthworks provide evidence of the history of the village and the presence of the Padbury Brook, from where the village derives its name, is also important. The generally rural character of the surroundings is in keeping with the historic context of the village and also contributes to its value.

St Mary's House

- 4.3.25 St Mary's House, a Grade II listed building, lies approximately 80m to the west of the Proposed Scheme in the village of Twyford. It is a two storey timber-framed building with brick chimney stacks and a tiled roof. The building originated in the 15th century as a pair of large medieval halls before being altered and extended in the 16th and 19th centuries. St Mary's House is situated in the north-eastern area of the village adjacent to the St Mary's Church. The house is surrounded by a small area of garden and bordered by a thin line of mature trees. The building is surrounded by open fields to the north and east. These fields include extant shrunken medieval village earthworks, representing the former manorial core of Twyford. The former course of a railway line lies approximately 80m to the north-east of the building.
- 4.3.26 The value of the building is derived from its aesthetic, architectural, historic and archaeological interest. It is a well-preserved example of a large early post-medieval dwelling with elements of an earlier manorial hall. The medieval elements of the building were originally situated in the centre of Twyford, as evidenced by the shrunken medieval village earthworks which lie immediately to the north and east of the building. These earthworks are considered to make an important contribution to the value of the building by providing a link to the original historic context of the building. The situation of the building on the outskirts of the village with open land to the east gives the building a high degree of peacefulness and the mature trees bordering the garden provide an element of privacy and seclusion. St Mary's House formerly served as the vicarage to the church and was owned for approximately 500 years by Lincoln College, Oxford. The relationship between St Mary's House and the St Mary's Church is considered to enhance its value.

St Mary's Church, Twyford (CALo57)

- 4.3.27 St Mary's Church, a Grade I listed building, lies approximately 130m to the west of the Proposed Scheme in the village of Twyford. It is a parish church in rubble stone with a tiled roof and a low square tower. Elements of the building date from the medieval period although it was extensively restored in the 19th century. The Church lies within a small

graveyard in the northern area of Twyford. A churchyard cross is situated within the graveyard; the cross is Grade II listed in its own right. The church is situated at the end of the main street in Twyford and its tower makes it locally prominent. The core of the village of Twyford lies to the south, with smaller scale residential buildings including the Grade II listed St Mary's House to the north and east. Beyond these buildings earthworks indicative of a shrunken medieval village are extant.

- 4.3.28 The value of the building is derived from its archaeological, architectural, aesthetic and historic interest. It is a well preserved parish church with substantial medieval elements, including a 12th century font, and medieval and post-medieval internal fittings. The prominence of the building at the end of the main street in Twyford with a small tower drawing the eye also contributes to this value. Those elements of the setting which are considered to contribute to this value are the churchyard and cross, which place the building in its original locale, as well as the medieval St Mary's House immediately to the north. This historically functioned as the vicarage associated with the church. The earthworks of the shrunken medieval village to the north and east of the church also make some contribution to its value, by reflecting the historic layout of the village around the church. The churchyard is relatively peaceful and is only disturbed by local traffic in Twyford.

Twyford Mill (CALo63)

- 4.3.29 Twyford Mill is a former water mill dating from the 18th century situated on a small stream. It is a brick and rubble stone building with a tiled roof and a brick arch extending over the mill race. It is situated in the northern area of a small complex of farm buildings, several of potentially contemporary date. Beyond this complex the mill is surrounded by a thin belt of mature trees and open agricultural land.
- 4.3.30 The value of Twyford Mill is considered to reside primarily in its fabric and the surviving mill features. The immediate setting of the building, the farm complex, makes some contribution to its setting, particularly the older buildings of the complex. Of particular importance to the building is the relationship between the mill and the watercourses which historically provided its reason for being, and hence make a key contribution to its value. The building is relatively isolated in the landscape and has a high degree of peacefulness.

Godington (CALo73)

- 4.3.31 Godington is a small hamlet to the south of the land required, both temporarily and permanently, for the construction of the Proposed Scheme, in Oxfordshire. The historic core of the village comprises a Grade II listed church in limestone with a tiled roof and a small pointed tower. It originated as a medieval parish church before being rebuilt in 1792 and restored in the 19th century. It is situated within a small graveyard bordered by mature trees in the centre of the small village. These mature trees provide an enclosed feeling to the churchyard. A former manor house, within a moated site, lies immediately to the north. This building is a large farmhouse in limestone blocks with a slate roof and a weathervane which includes the date 1672. The building lies on a central island within a large moat suggesting that it may contain elements of medieval date which relate to the original settlement. These buildings are surrounded by earthworks indicative of a shrunken medieval village.

- 4.3.32 Godington is a small hamlet, with a rural character, and is particularly peaceful. The setting of the hamlet, a mix of medieval earthworks and the wider agricultural landscape, contributes to its value by placing it in its historic context.

Rosehill Farm (CALo77)

- 4.3.33 Rosehill Farm was originally an agricultural holding with associated ancillary buildings including a large detached farmhouse, a large barn and a range of storage barns, stables, a small open barn and a cottage with attached buildings. The farm is well documented on 19th century maps, where it is recorded as Rose Farm.
- 4.3.34 The demolition and redevelopment of the farm buildings was undertaken in the early 21st-century, preserving only the original farmhouse. There are now three dwellings on the farm site: Rosehill Farmhouse, Old Stable Cottage and Rosehill Barn. Old Stable Cottage and Rosehill Barn are modern developments located on the same footprint of the original buildings. The only remaining structure of the 19th century farm is the farmhouse, which has also seen much alteration during the 20th and 21st centuries, and is considered to be of some limited value, based upon the potentially historic elements of its core. The setting of the building is not considered to contribute to its value. The cottage (CALo76) has been rebuilt and is not considered to be a heritage asset.

Sunflower Farmhouse (CALo83)

- 4.3.35 Sunflower Farmhouse is a large two storey Grade II Listed building, on the edge of Chetwode, constructed of rubble stone with a tiled roof and brick chimney stack. A stone plaque on the northern side is dated to 1652 and also records the initials 'PH TBK'. The building is situated within a large garden, a mixture of lawns and flowerbeds, and a modern farm complex is situated to the north. Small undulations indicative of former earthworks, potentially a former fishpond or other feature, was recorded in the garden during a site visit. The farm is relatively isolated and the wider setting is primarily open agricultural fields.
- 4.3.36 The value of Sunflower Farmhouse is primarily derived from its fabric. As an example of a precisely-dated large post-medieval farmhouse it has historic, evidential, and aesthetic value. The relationship between the farmhouse and the garden is considered to make a contribution to the value of the building, as the earthworks provide links to the historic setting of the building, potentially as part of a medieval farmstead. The open fields around the building also contribute to this value by placing the building in context as a farmhouse.

Chetwode (CALo98)

- 4.3.37 Chetwode is a small dispersed settlement to the north of the land required for the construction of the Proposed Scheme. It includes four Grade II listed buildings and a Grade I listed church which includes a particularly significant stained glass window. The church, Sunflower Farmhouse and The Hermitage are discussed separately below. Chetwode is designated as conservation area which extends into the land required for the construction of the Proposed Scheme.
- 4.3.38 The character of the village is rural, with large areas of open green space between the historic buildings which make up the village. The value of Chetwode resides in the fabric of

its historic buildings, as well as the particularly long recorded history and the former establishment of the priory, the remains of which contribute to the character and appearance of the village. Modern development is extremely limited resulting in a coherent historic hamlet, a factor considered to add to the character, and by extension the value, of Chetwode. The setting of the village, a rural agricultural landscape with extensive medieval earthworks, contributes to the value of the village.

The Hermitage (CALog3)

- 4.3.39 The Hermitage (formerly known as Wells Farm) lies adjacent to the land required, both temporarily and permanently, for the construction of the Proposed Scheme which extends completely around the southern, eastern and western edges of the immediate garden and partially around the northern edge. It is a Grade II listed building. The Hermitage is a two storey building in rubble and brick with leaded windows. The roof is tiled and includes dormer windows. A small single storey extension is built onto the eastern side of the building. The listing description states that the building is primarily of 18th century date, although the window fittings and glass date from the 20th century. The building is situated to the south of the small settlement of Chetwode and approached along a driveway leading west from the main road. A large garage, formerly a stables or other farm building probably constructed as part of Wells Farm, lies to the rear of The Hermitage. The building is situated within a large garden which is a mix of lawns, flowerbeds and mature trees. Two moats, potentially of medieval date, are extant within the grounds along with other linear earthworks and a well. The building is isolated with a distinct sense of privacy and seclusion.
- 4.3.40 The value of the building is derived primarily from its architectural, aesthetic, historical and archaeological interest. The setting of the building is also considered to make a major contribution to its value. Chetwode was the site of a priory, established in 1245, and the priory remains extant approximately 200m to the north of The Hermitage. The extensive earthworks within the grounds of the building suggest that the grounds may have formed part of a medieval ecclesiastical landscape. The surviving remains of these earthworks place the building in the context of this landscape and therefore contribute to its value. The relationship between the building and the garages to the rear also enhances the value of the building as surviving elements of the building's former use as a farm.

Church of St Mary and St Nicholas(CAL117) and Priory House, Chetwode

- 4.3.41 The Church of St Mary and St Nicholas in Chetwode lies approximately 60m to the north-east of the land required for the construction of the Proposed Scheme. It is a parish church in rubble stone with a slate roof and a low tower. The core of the church was originally part of a 13th century Augustinian priory and the building also includes elements of later medieval and post-medieval date. The south window includes a rare example of medieval glass, dating from the 13th and 14th centuries and depicts the crucifixion, St John the Baptist, the Virgin Mary and St Peter, as well as a particularly early depiction of the Royal coat of arms, consisting of three vertical lions/leopards. These are rare examples of surviving in-situ gothic glass and add to the value of the building.
- 4.3.42 Priory House, a Grade II listed building, lies immediately adjacent to the church. It is a large house in rubblestone, with a slate roof. Although the building has a date plaque of 1833, there are elements which are considerably earlier, including 16th century mullion

windows, as well as evidence of re-used material from the medieval priory situated in this area.

- 4.3.43 The settings of the buildings add to their value. A graveyard extends to the north of the buildings with a small copse of trees extending around the north and west of the building. Earthworks of medieval date including fishponds and moated sites are recorded in the wider environs of the church, particularly to the west and south-west. The church and Priory House lie within the Chetwode conservation area.
- 4.3.44 The value of the church and Priory House is considered to lie primarily within their fabric. The church a rare example of a surviving part of a medieval priory and is now a well-preserved church with substantial medieval elements, including a rare medieval window and other medieval and post-medieval internal fittings. Priory House similarly incorporates medieval material and early post-medieval features, although it is clearly not an extant part of the former priory, as the church is. The medieval earthworks to the east of the church are considered to contribute to its value by reflecting the historic layout of the landscape at the time of the founding of the priory. The local prominence of the small tower is also considered to contribute to its value, as is the relationship with the adjacent Priory House. Chetwode is a small hamlet and the churchyard is peaceful.

Barton Hartshorn (CAL109)

- 4.3.45 Barton Hartshorn is a small hamlet to the north of the land required for the construction of the Proposed Scheme, adjacent to the Buckinghamshire/Oxfordshire county boundary. It includes four Grade II listed buildings: the St James' Church, Manor House, Manor Farmhouse, and Kings End Farmhouse.
- 4.3.46 Barton Hartshorn is a small hamlet with a predominantly rural character. There is a relatively limited amount of modern development, which serves to enhance its character and appearance, from which the value of the village is derived. The setting of the village is predominantly rural but includes medieval earthworks to the south. This setting and the earthworks in particular through their evidential value, are considered to contribute to the value of the village.

4.4 Selected designated built heritage assets within the Zone of Theoretical Visibility

- 4.4.1 The criterion for inclusion within this section is that the Proposed Scheme is assessed in the impact assessment table in Volume 5: Appendix CH-003-013 as having a major or moderate adverse effect upon a designated asset which lies within the ZTV, but outside the 500m study area. Descriptions and considerations of the value of all designated assets within the ZTV can be found in the Gazetteer in Volume 5: Appendix CH-002-013.
- 4.4.2 There are no designated heritage assets within the study area which are located within the ZTV, but outside of the 500m study, that are deemed to have a major or moderate adverse effect as a result of the Proposed Scheme.

5 Historic map regression

- 5.1.1 The analysis of the cartographic evidence for the study area has been integrated within the archaeological and historical baseline narrative (Sections 3 and 4 of this report).

6 Historic landscape

6.1 Historic landscape characterisation

- 6.1.1 Buckinghamshire County Council has carried out a programme of historic landscape characterisation across the entire county. This section was written with reference to this, as well as historic maps, site familiarisation visits, geology and hydrology sources, and other documents.
- 6.1.2 The study area lies within a watershed between watercourses that drain either to the south and west via the Cherwell to the Thames or to the north and east into the Nene and Great Ouse. The Padbury Brook is the main watercourse in this area. It rises near Chetwode and meanders past Twyford before draining northwards to the Great Ouse near Buckingham.
- 6.1.3 The area is generally characterised by a gently undulating landform and forms part of the claylands that dominate the northern section of Aylesbury Vale. The landscape in this area is overwhelmingly rural with occasional isolated farms. These complexes are generally a mixture of historic farmhouses and more modern industrial outbuildings and barns. The historic landscape character within the study area is predominantly one formed by private and parliamentary enclosure during the post-medieval period, with more limited evidence of earlier landscapes. The latter include the early medieval dispersed settlement at Chetwode, and evidence of shrunken medieval villages at Godington (CAL072, Twyford (CAL 051) and Cowley (CAL065)).
- 6.1.4 The southern part of the study area is dominated by the evidence of large industrial clay extraction. The former Calvert Brickworks has removed much of the former landscape evidence to the south of the Buckinghamshire Railway. These pits have subsequently been reused as landfills, a nature reserve and a housing estate.
- 6.1.5 The clay extraction works were confined to the land to the west of the Great Central Railway Line built in 1899 which runs through the centre of the study area. The land to the east of the railway retains its historic pattern of small, irregular fields, probably a result of piecemeal enclosure. The southern part of the study area previously formed part of the Claydon Estate. An example of a decoy pond, used for hunting ducks and other game, is situated within Decoypond Wood (CAL002). This landscape is now agricultural and this former estate or parkland is no longer intelligible.

6.2 Selected historic landscape components

- 6.2.1 Within the broader tapestry of historic landscape in the study area, the following landscape within 500m of the land required, temporarily or permanently to construct the Proposed Scheme have been identified as having particular qualities with regard to historical legibility.

Chetwode historic landscape (CAL127)

- 6.2.2 The Chetwode landscape component is a well preserved area of early post-medieval enclosures, within which earlier medieval elements survive. The focus of this

landscape is the hamlet of Chetwode (CALog8), with small settlements at Sunflower Farm and The Green.

- 6.2.3 This landscape component forms an integral part of the setting of Chetwode. Although the field boundaries are generally post-medieval, the multiple medieval earthworks (CALog5, CALog6, and CALog7) illustrate the time depth of the landscape. These are related to the medieval priory at Chetwode, and serve to place the landscape in context as the hinterland of an ecclesiastical site. The landscape itself is generally agricultural, a continuation of the historic land use, although it is bisected by the earthworks of a former railway. These earthworks represent a later intrusion into the earlier medieval and post-medieval landscape.

6.3 Important hedgerows

- 6.3.1 Two hedgerows within the land required, temporarily or permanently, to construct the Proposed Scheme are considered to be important under the Hedgerow Regulations 1997 Criteria for Archaeology and History⁴⁶.
- 6.3.2 One hedgerow (CALo30) follows the line of a parish boundary and as such falls within the criteria for an important hedgerow.
- 6.3.3 One hedgerow (CALo71) follows the course of a county boundary between Buckinghamshire and Oxfordshire and as such falls within the criteria for an important hedgerow.

⁴⁶ HMSO, Hedgerow Regulations, (1997), Statutory Instrument 1997 No. 1160.

7 Archaeological character

7.1 Introduction

- 7.1.1 To determine the archaeological potential for the study area, it was sub-divided into archaeological character areas. These archaeological character areas are derived from a consideration of the current topography, geology and current land-use. From these factors the potential for recovery of archaeological remains is considered.
- 7.1.2 From these broad character areas, the landscape was further subdivided into archaeological sub-zones (ASZ) which have allowed for a more in-depth understanding of the archaeological potential of the study area. The study area has been sub-divided into 17 archaeological sub-zones. Although initially defined and characterised by current land use, a number of additional factors have determined the potential of these sub-zones to contain archaeological remains of value. These factors include topography, geology, historic character and distribution of known archaeological finds, sites and assets.

7.2 Character areas

- 7.2.1 A single archaeological character area has been identified for the study area.

Archaeological Character Area 1: Aylesbury Vale claylands/Padbury Brook headwaters

- 7.2.2 This archaeological character area is dominated by an undulating landform formed from heavy Oxford Clays, with limited areas of alluvium and gravels around the Padbury Brook. Drainage flows north and east into the Great Ouse from the Padbury Brook.
- 7.2.3 The settlement character in this area is dispersed and comprises scattered settlements and hamlets. The predominant landuse is parliamentary enclosure with some earlier enclosures and remaining ancient woodland, part of Bernwood Forest. Landuse is predominantly pasture which means that ridge and furrow of former medieval open field systems survives well.
- 7.2.4 Archaeological evidence is limited reflecting a lack of archaeological work in the study area. Earthworks of abandoned medieval moated sites, villages and ridge and furrow agriculture survive in a number of locations.

7.3 Archaeological sub-zones

- 7.3.1 The archaeological sub-zones are presented in Table 1: archaeological sub-zones, south to north.

Table 1: Archaeological sub-zones

Number	Name	Topography	Geology/soils	Modern land use	Historic character	Archaeology (from baseline)
1	Calvert landfill	As a former claypit the original topography has been removed	The solid geology comprises Mudstone of the Peterborough Member	Landfill	Formerly part of the Royal Forest of Bernwood, this was excavated as a claypit in the 20th century.	Any archaeological remains will have been removed.
2	Decoypond Wood	Generally level, slight west facing slope	The solid geology comprises Mudstone of the Stewartby Member	Woodland	The ASZ is designated as ancient woodland, and is recorded as such on early maps.	The ASZ formed part of the medieval Royal Forest of Bernwood and there may be preserved woodland features of medieval and post-medieval date. Settlement remains are unlikely. A large post-medieval decoy pond lies within the wood (CAL002).
3	Fields around Great Pond Farm	The fields are situated on a slight west-facing slope which rises to Knowl Hill to the east of the CFA	The ASZ sits on an interface between the Stewartby and Peterborough Mudstone Members.	Agriculture	The ASZ is rural and agricultural, with the irregular boundaries indicative of piecemeal enclosure. This area was probably historically part of Bernwood Forest, and may have included a large pond, as indicated by Great Pond Farm.	The ASZ formed part of the medieval Royal Forest of Bernwood and there may be preserved woodland features of medieval and post-medieval date. Medieval and post-medieval settlement remains are unlikely. There are antiquarian references to potential Roman finds in the area (CAL015), suggesting there may be potential for currently unrecorded features.
4	Former claypit and depot	As a former claypit, the original topography has been partially removed. It previously formed a gentle east facing slope.	The solid geology comprises Mudstone of the Stewartby Member.	Partially unused, with areas of agriculture, ponds and a sports pitch.	Formerly part of the Charndon this was excavated as a claypit and depot in the 20th century.	Any pre-20th century archaeological remains will have been removed. There is potential for modern industrial remains.
5	Calvert	Generally flat	The solid geology comprises Mudstone of the Stewartby Member.	The village of Calvert	Calvert is predominantly modern, although buildings in the northern part date from the very end of the 19th century.	There is considered to be some potential for 20th-century industrial remains.

Number	Name	Topography	Geology/soils	Modern land use	Historic character	Archaeology (from baseline)
6	Former extraction pits	The natural topography has generally been removed	The solid geology comprises Mudstone of the Peterborough Member.	Nature Reserve	The landscape formed small regular enclosures, before being excavated in the 20th century.	There is considered to be some potential for 20th-century industrial remains.
7	Fields to the south of the Buckinghamshire Railway	Slightly undulating	The solid geology comprises Mudstone of the Peterborough Member, with deposits of till recorded in two areas. Several canalised drains run through the ASZ, although no alluvial deposits are recorded. The only alluvium lies in the eastern area adjacent to the course of a small brook.	Agriculture, a mix of arable and pasture	The landscape comprises a series of regular enclosure, probably divided allotments dating from the 18th century.	No archaeological remains have been recorded within the ASZ, but the presence of drift deposits and alluvium may indicate a general background potential.
8	Parliamentary enclosure to the south of Infrastructure Maintenance Depot	The fields are situated on a gentle south-facing slope	The solid geology comprises Mudstone of the Peterborough Member. A large area of alluvium is recorded in the western area adjacent to a stream.	Largely arable agriculture with a small area of managed plantation	The straight boundaries in the ASZ are indicative of an organised programme of parliamentary enclosure.	Although no archaeological finds or features are recorded in this ASZ, there is considered to be some potential for settlement remains based upon the south-facing topography and the adjacent watercourse.
9	Fields to the north of Claydon Station	The fields are situated on a gentle south-east facing slope	The solid geology is a mix of mudstone of the Peterborough and Stewartby Members. Deposits of Diamicton Till and river terraces of sand and gravel, are recorded in the northern area.	Agricultural, primarily arable	The fields in this area are characterised by irregular boundaries indicative of a programme of piecemeal enclosure.	Although no archaeological finds or features have been recorded in this ASZ, the topography and geology suggests there may be some potential for archaeological remains, including redeposited Early Prehistoric finds within the gravels.
10	Historic core of Steeple Claydon	This area is situated on a gentle south-east facing slope	The solid geology comprises mudstone of the Stewartby member. This is overlain by deposits of	A mix of settlement and agricultural land	This area comprises the historic core of the former village which includes the church; manor house, and shrunken medieval	This area includes extant earthworks of medieval and post-medieval date (CAL035, CAL036), as well as a landscaped avenue (CAL034) and extant historic

Number	Name	Topography	Geology/soils	Modern land use	Historic character	Archaeology (from baseline)
			sands and gravels.		village earthworks.	buildings
11	Steeple Claydon	Modern village	A mix of river terrace deposits and Till, underlain by Mudstone of the Stewartby Member.	Settlement	This area is the post-medieval expanse of Steeple Claydon.	Built heritage is the primary resource, with potential for some earlier Post-medieval settlement remains.
12	Fields to south of Steeple Claydon	Slight south-facing slope	A mix of river terrace deposits and alluvium underlain by Mudstone of the Stewartby Member. The superficial deposits follow the course of an offshoot of the Padbury Brook which runs north-west/south-east through the ASZ.	Agriculture	The area has historically been agricultural with field boundaries indicative of divided allotments, a result of a planned programme of enclosure.	Although no archaeological remains have been recorded in this area, the topography and geology suggest there may be potential for settlement features.
13	Fields to the south of Padbury Brook	Generally level	A mix of river terrace deposits and alluvium underlain by Mudstone of the Stewartby Member. Superficial deposits of sand and gravel extend across large areas of the ASZ.	Agriculture, mainly arable	The very regular pattern of field boundaries suggests a planned programme of enclosure.	Chance finds of Neolithic material have been recorded in this area (CALo42), along with Palaeolithic finds within the gravel terraces (CALo41).
14	Fields north of Portway Road	Slight south-facing slope	The underlying geology is Mudstone of the Peterborough formation. Deposits of sand and gravel and alluvium are recorded in the eastern area adjacent to an offshoot of the Padbury Brook.	Agriculture	The very regular pattern of field boundaries suggests a planned programme of enclosure.	The area formed part of the hinterland of medieval Twyford and there may be potential for agricultural evidence dating from this period. Shrunk medieval village earthworks in the southern area of the sub-zone suggest potential for medieval settlement (CALo44, CALo50). The geology and topology indicates there may be a general potential for earlier remains.
15	Twyford	Generally flat	Mudstone of the Peterborough Member,	Settlement	Medieval village with later	Primarily built heritage of medieval and

Number	Name	Topography	Geology/soils	Modern land use	Historic character	Archaeology (from baseline)
			overlain with River terrace deposits.		expansion.	post-medieval date (CALo59).
16	Twyford shrunken medieval village	Generally flat	Alluvium and river terrace deposits overlying mudstone of the Peterborough formation.	Pastoral agriculture	This areas includes the former extent of medieval Twyford, as well as ridge and furrow evidence of earlier open fields.	Medieval and post-medieval settlement remains and a general potential for earlier settlement based on topography and geology.
17	Padbury Brook to the north of Twyford	Slight south-facing slope.	Area of alluvial deposits, with river terrace gravels to the west.	Agriculture	Small regular fields indicative of planned enclosure.	This area includes a medieval mill, and there is considered to be potential for both redeposited Palaeolithic remains in the gravels and palaeoenvironmental remains to be 'sealed in' by alluvium.
18	Field to the north of Twyford Mill	Slight south-west facing slope	Alluvial deposits associated with the Padbury Brook.	Agriculture	Small regular fields, cut through by mill leats and the Padbury Brook.	Twyford Mill (CALo63) lies immediately to the south and there may be potential for palaeoenvironmental remains to be preserved in the alluvium. There is a general archaeological potential based upon the landscape and geology.
19	Cowley Farm	The high ground of the farm falls away to the south and west.	Mudstone part of the Peterborough member. A small area of till is recorded around the farm itself.	Agriculture	Irregular fields, probably enclosed in a piecemeal pattern pre-dating formal enclosure.	A large shrunken medieval village, Cowley (CALo65), lies on the top of a small hill. Two Bronze Age round barrows (CALo67) lie on a false crest, overlooking the course of the Padbury Brook. There is considered to be potential for currently unrecorded remains of similar and later date.
20	Buckinghamshire / Oxfordshire Border	Generally flat	Extensive deposits of alluvium and gravels reflect the divided course of the Padbury Brook. The solid geology is Mudstone of the Peterborough member.	Agriculture	Small, regular fields, probably reflecting a planned programme of enclosure.	Prehistoric enclosures are recorded from cropmarks (CALo75) and there is considered to be a general archaeological potential based upon the topography and geology.
21	Godington	Generally flat	The solid geology is Mudstone of the Peterborough member,	Settlement	Small hamlet of Godington.	A medieval moated site and manor house are recorded in the northern part of the settlement, and with earthworks of a

Number	Name	Topography	Geology/soils	Modern land use	Historic character	Archaeology (from baseline)
			overlain by sand and gravel deposits.			shrunk medieval village to the south (CAL072).
22	South of Manthorne Farm	A small plateau between Chetwode Grange and Barton Hill Farm in an area which is otherwise on a gentle west facing slope	This area is primarily till, situated on Mudstone of the Peterborough Member.	Agriculture	This area is characterised by large, irregular fields.	No archaeological finds or features are recorded in this area. The potential for currently unrecorded remains is considered to be limited.
23	Chetwode	Situated on a slight west-facing slope	This area is primarily till, situated on Mudstone of the Peterborough Member	A mixture of settlement and agriculture.	Chetwode is a small settlement dispersed over a large area and interspaced with agricultural fields and other features.	Chetwode is of early medieval origin, and includes multiple moats, fishponds and other features of medieval date (CAL094, CAL).
24	Fields to the north of Chetwode	Situated on a slight south-facing slope with Barton Hartshorn at the summit.	This area is primarily till, situated on Mudstone of the Peterborough Member.	Agriculture	Small enclosures with generally straight boundaries.	A cropmark indicative of a ring ditch is recorded, but no other finds or features. There is considered to be some potential here for remains prehistoric date.

8 Analysis and research potential

8.1 Analysis of understanding

- 8.1.1 There is a clear lack of archaeological evidence within the study area, primarily as a result of lack of development, and potentially due to the inhospitable environment formed by the heavy Oxford Clay. Archaeological assets and features identified within the study area are primarily medieval and post-medieval, although there is considered to be potential for encountering further unrecorded archaeological assets and features, particularly of Iron Age/Roman date.
- 8.1.2 Key archaeological sites have been identified within the land required for construction of the Proposed Scheme. These comprise:
- decoypond within Decoypond Wood (CAL002);
 - potential remains of the medieval Three Bridge Mill (CAL047);
 - remains of Chetwode Water Mill (CAL070);
 - medieval earthworks around the Hermitage (CAL094);
 - a medieval moated site to the north of the Hermitage (CAL095);
 - the remains of the former Calvert Station (CAL010);
 - irregular potential features to the north of Twyford (CAL052);
 - former fishponds at Sunflower Farm (CAL081); and
 - small group of ditches at Chetwode, recorded from aerial photographs (CAL118).
- 8.1.3 There is a lack of archaeological evidence within the study area primarily as a result of lack of archaeological work but also potentially due to the inhospitable environment formed by the heavy Oxford Clay in the southern half of the area. Archaeological assets and features identified within the study area are primarily medieval and post-medieval although there is considered to be potential for encountering further unrecorded archaeological assets and features throughout the study area, particularly of Iron Age/Roman date.
- 8.1.4 The geology and topography of the southern part of the study area, heavy clay with limited water courses, is ill-suited to occupation and exploitation. The streams in the northern half are larger with areas of alluvium and gravels recorded along these watercourses and there is potential for these deposits to 'seal in' palaeoenvironmental remains. There is considered to be particular potential for archaeological remains to lie in the area of the IMD where gravel deposits are considered particularly suitable for the preservation of redeposited Palaeolithic remains.
- 8.1.5 The study area appears to have been largely wooded during the early medieval period, part of the Royal Forest of Bernwood with disafforestation and assarting undertaken during the later medieval period. Moated sites are common, along with the deserted

medieval villages, and the layout of some extant settlements is likely to represent expansion of medieval cores. The exception to this is Chetwode which is a dispersed settlement of Late Saxon date. There is potential for evidence of medieval date around the settlements of Steeple Claydon, Twyford, Cowley, Godington and Chetwode. Two potential medieval mills, at Chetwode and Three Bridge, lie within the study area.

8.1.6 The area of highest archaeological potential is considered to be around the Padbury Brook in the central part of the study area, and around Chetwode. Potential elsewhere is harder to quantify, again primarily as a result of the restricted amount of previous archaeological work which has been carried out.

8.1.7 Understanding of the archaeological potential of the area is constrained by several factors including;

- the lack of archaeological work carried out within the study area;
- the masking effect of extant ridge and furrow earthworks on the detection of earlier archaeological remains such as cropmarks;
- the truncation effect of ridge and furrow agriculture on earlier archaeological remains;
- limited effectiveness of geophysical survey on the geology of the study area; and
- the lack of cropmarks on the heavy clay (see Appendix CH-004-013).

8.2 Research potential and priorities

8.2.1 Many research questions can best be formulated at either a scheme-wide or at a county/multiple community forum area level. These will draw heavily on the regional and period research frameworks, which have been prepared with support from English Heritage⁴⁷.

8.2.2 This section presents research questions which are specific to the heritage assets, either known or suspected, within the Calvert, Steeple Claydon, Twyford and Chetwode study area.

Research Questions

8.2.3 The research questions are considered on a chronological basis.

- can knowledge of earliest hominin activity in region be refined and can the hypothesis that there is no pre-Levallois activity north of the Vale of Aylesbury be tested?
- palaeoenvironmental evidence is lacking within the study area and the wider landscape. Can the waterlogged deposits provide evidence of the prehistoric environment and shed light on potential use of the claylands in this period?

⁴⁷ Oxford Archaeology, (2009-2010), *The Solent-Thames Research Framework Resource Assessment*.

- can the shrunken medieval villages at Twyford and Steeple Claydon shed light on the use of the landscape within the study area during the medieval period, and provide more information on the changing pattern of settlement which led to their decline?
- can the earthwork remains at Chetwode shed light onto the changing role of the land around the Hermitage, and potentially upon the Chapel of St Stephen?
- what is the potential for pre-medieval archaeological remains to be masked beneath extant ridge and furrow earthworks? Is this a contributing factor to the lack of archaeological evidence within the study area?
- what is the pattern of funerary monuments in the clayland?
- are there any prehistoric remains within the study area, and can they shed light on the use of the claylands around the Padbury Brook in this period?
- there is a general lack of archaeological evidence within the study area; is this a biased result of limited archaeological works, or does it reflect limited historic activity due to the heavy clay and lack of watercourses?
- to what extent did the field systems and settlements of the Iron Age to Roman transition in the study area result in a re-shaping of the landscape?
- can the extent(s) of the Royal Forest of Bernwood be determined at various periods; can our understanding of the processes behind the expansion and decline of the Royal Forests be expanded, and is there evidence of assarting and other woodland settlement activity?
- what evidence survives relating to the construction of the railways, and can we draw any conclusions about their role in social history, including any navvy camps or other features?

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